Name	Date	Type	Size
ross socomm lva	5/13/2008 3:27 PM	E-mail Message	6 KB
ross schwartz iacp no reply	12/12/2017 10:02...	Outlook Item	42 KB
ross schwartz iacp involvement	12/12/2017 10:02...	Outlook Item	42 KB
ross schwartz cvsa in canada	12/12/2017 10:04...	Outlook Item	24 KB
ross schwartz 8 3 14 no response	12/12/2017 9:56 AM	Outlook Item	48 KB
ross schwartz 8 3 14 iacp	12/12/2017 10:00...	Outlook Item	48 KB
ross schwartz 7 10 14 iacp update	8/3/2014 9:25 AM	Outlook Item	61 KB
ross schwartz 7 6 14 no reply	12/12/2017 10:03...	Outlook Item	48 KB
ross schwartz 7 2 14 no reply iacp	12/12/2017 10:01...	Outlook Item	48 KB
ross lied about trump	12/12/2017 9:58 AM	Outlook Item	125 KB
ross johnson iacp cvsa	12/12/2017 10:11...	Outlook Item	65 KB
ross cvsa 12 18 12	12/12/2017 9:53 AM	Outlook Item	31 KB
ross cvsa 4 9 12 zimmerman	12/12/2017 10:18...	Outlook Item	26 KB
ross baines vancouver sun	12/12/2017 9:49 AM	Outlook Item	59 KB
ross 12 18 12 no response cvsa	12/12/2017 10:14...	Outlook Item	32 KB
ross 9 7 12 reply	12/12/2017 9:46 AM	Outlook Item	31 KB
ross 4 9 12 cvsa	12/12/2017 9:45 AM	Outlook Item	26 KB
ross 1 4 13 iacp ad refusing	12/12/2017 9:56 AM	Outlook Item	67 KB

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FIELD EVALUATION OF EFFECTIVENESS OF VSA (VOICE STRESS ANALYSIS) TECHNOLOGY IN A US CRIMINAL JUSTICE SETTING

This research paper represents 18-years of data evaluating the use of the VSA technology for the detection of stress associated with possible deception. Using a combinatorial approach of VSA and a standardized questioning process, an expert obtained the results of stress detection associated with criminal activities, which are proven in 95% of cases. On the other hand, there were no cases when a confession was obtained in the absence of stress. In particular, the most considerable stress levels were detected during the investigation of murder cases, grand larceny and sexual crimes. When the VSA technology was used for diagnostic purposes to predict deception, positive results were obtained in approximately 95% of the cases. Additionally, a strong, indirect relationship (approximately 94%) was discerned between jeopardy (crime consequences) and confession rates among guilty suspects.

The implications of the findings for the suitability of VSA as a deception detection tool in the field are discussed.

1. Introduction

This retrospective analysis assesses 18-years of actual criminal cases, all of which involved Voice Stress Analysis (VSA) examinations conducted by an experienced criminologist. The purpose of this analysis is to evaluate the efficacy and accuracy of VSA technology as a decision support tool

for the detection of stress associated with deception during criminal investigations.

It is known that the encoding of physical stress in the human voice is highly influenced by an increase in respiration, which heightens the sub-glottal pressure during phonation. The distance of speech between breaths is diminished, while the articulation rate is affected. Stress changes the larynx muscle activity and vocal folds, which subsequently modifies the air velocity through glottis and sound frequency (i.e., as vocal folds increase in tension, the frequency increases). Stress also affects the activity of other muscles like tongue, jaw and lips, which shape the resonant cavities and alter speech production [7].

Olaf Lippold's mid-20th century discovery of the 8-12 Hz range physiological tremor in human muscles led to additional research concerning the relationship between psychological stress and the human voice, for the purpose of developing a technology capable of accurately detecting vocal stress levels [6], [12].

The first commercially available VSA system was developed through experimentation by Allan D. Bell, Jr., who discerned which voice characteristics were most likely to show stressed responses. Bell's early studies focused on Frequency-Modulated infrasonic modulations (< 20Hz), which are below the level of human audibility. According to Bell, the unstressed muscle allows a greater variation in the Frequency-Modulated intonation, which becomes flatter as stress increases. This flattening effect could be graphically displayed as VSA output. In fact, VSA output charts show that the normal unstressed voice started with a gradual buildup from initial low energy to full force. Conversely, the stressed utterance usually started with an initial burst of energy and diminished without displaying the Frequency Modulation that characterizes the unstressed pattern. Thus, the stressed utterance resulted in a much flatter line in the graphic output. Based on his findings, Bell produced a VSA device that could detect, measure, and graph the infrasonic wave forms produced by the human voice [1 - 2].

In theory and practice, VSA is designed to identify the phases in speech where the voice displays discernible signs of being under constraining influence. Once the affected utterances are isolated, trained VSA examiners investigate the source for such stress, and question the subject (i.e. the speaker) with a goal of establishing the truth concerning a specific matter. Thus, VSA is categorized as a truth verification technology.

VSA examinations are conducted using established questioning protocols to determine the stress or lack thereof in the human voice. Stress, or the lack thereof, can be identified by a trained VSA examiner to assist in determining truthfulness or deception of the examinee's responses to direct questions. This is accomplished by analyzing and quantifying the characteristic shapes of the voice graphs (e.g., amplitude, cyclic changes, leading edge slopes, and square waveform shapes or blocking) produced by the examinee.

Critics of VSA have debated this technology's accuracy and dependence upon output in coding data is reflective of the algorithms used and the effectiveness of the examiners. Some researchers have claimed that vocal changes cannot be detected as a result of stress, while others have asserted that VSA and its competitors are insensitive to stress and deception, both in the laboratory and field [8].

Advocates of VSA understand its limitations, but they also recognize its promise, as the technology has improved considerably over time. VSA mathematical models are continually being developed and optimized. For instance, Adaptive Empirical Mode Decomposition (AEMD) differentiates between low to medium stress levels in the human voice by decomposing nonlinear, non-stationary signals into the sum of a series of stationary signals, which allows specific fluctuations in frequency and amplitude to be detected in real-time [18].

Additionally, proponents state that even with the use of well-established "staple" algorithms (e.g., Fast Fourier Transform; the McQuiston-Ford Algorithm) VSA is an effective technology for the investigation and detection of human stress associated with deception [9]. As a result of the McQuiston-Ford Algorithm used in several modern VSA systems, the recorded changes of the human voice can be converted into easy-to-interpret voice patterns (i.e., graphical displays), which can be

analyzed and quantified by trained VSA examiners. Further, today, such analyses can be accomplished automatically, by allocating percentages of stress for each voice pattern using standardized scoring processes [16-17].

Gaining valid and verifiable information has long been a challenge for criminal investigators striving to separate the guilty from the innocent. Many stress-detection technologies have proven to be cumbersome and time-consuming, culminating in questionable results [14]. On the other hand, technology-free investigative interviews and interrogations conducted by police have generally not attained confession rates exceeding 50% [11]. To date, researchers have overlooked a valuable benefit of VSA technology: in the hands of skilled professionals, VSA processes can support investigative assessments, which dramatically increase the rate of valid and legally acceptable confessions and admissions from suspects and other persons of interest to the criminal justice system.

The goal of this retrospective study was neither to disprove nor discredit older stress and deception detection technologies currently in use. Rather, analyses of the cases, conducted over an 18-year period, aimed to test the hypotheses relevant only to this particular technology: during criminal justice investigations, VSA can serve as a reliable decision support tool to help discriminate between deception and no deception; stress and confession rates are interdependent; and the level of jeopardy associated with specific crimes can affect the confession rates obtained from guilty individuals under investigation.

2. Method

2.1   Case and Subject Representation

The original group of total case subjects (n > 3,000) tested over an 18-year period was culled for those that could be retrospectively studied, such that they met the following requirements: a confession had been a potential outcome (i.e., a crime had been committed in which the individual was implicated); there was no involvement with non-criminal statement veracity testing; no employment

clearance was involved; the case was not used as confirmation of witness testimony; and controlled testing had occurred (i.e., responses could be verified by the VSA process by means of structured re-questioning).

Following the excluded group, the cases that remained were (n=2,109). After these cases were numbered in consecutive order, the numbers were separated and pooled. The concealed, individual numbers were then randomly selected in single-blind fashion, before being disclosed to the primary researcher for analysis and review. From this final set of cases (n=236), there were (n=329) possible confession outcomes. Not included in the confession rate were those confessions in which suspects admitted their guilt to a wrongdoing other than the crime(s) specifically addressed during the examination.

The subjects (n=279) within this study ranged in age, from 5 to 74, 84% (n=234) were male, and 16% (n=45) were female. Their representation included criminals, defendants, suspects, persons of interest, and court-ordered mandates (e.g., child protective situations), in total n=259, and alleged victims n=20. Within the former group, organized/contract criminals were also included (n=6). A wide spectrum of people was examined from those with no criminal history, to those with previous arrest and/or conviction records, as well as professional criminals; wealthy individuals; well-educated professionals; public officials; indigents; and those found to be below normal intelligence. The number of crimes represented per case ranged from (n=1-3).

Among the different crime types (n=29) in this study: murder 18.2% (n=60), rape 15.8% (n=52), grand larceny 14.9% (n=49), burglary 9.1% (n=30), sexual abuse 8.8% (n=29), larceny 4.6% (n=15), arson 5.8% (n=19), assault 4.9% (n=16), and robbery 3.3% (n=11) were the crimes mostly heavily represented. The crimes that were moderately represented included sodomy 1.5% (n=5), child abuse 1.5% (n=5), armed robbery 1.5% (n=5), misconduct 1.2% (n=4), criminal mischief 0.9% (n=3), weapons violations 0.9% (n=3), narcotics 0.9% (n=3), fraud 0.9% (n=3), indecent assault 0.9% (n=3),

bomb threats 0.6% (n=2), sexual contact 0.6% (n=2), and kidnapping 0.6% (n=2). The crimes that were of low representation (n=1) included manslaughter, coercion, attempted murder, attempted rape, missing person, felony DWI, buying testimony, and perjury.

2.2   Interview Formatting and Modus Operandi

Ninety-one percent (91%) of the cases under study represented criminal investigations in which authorities had reached an impasse. In each case, the procedure used by the VSA examiner consisted of the following steps: receiving a briefing from the requesting agency, interview of the subject, questioning, re-questioning, final evaluation by VSA, and post-examination interview if required.

Each subject within the Confession Possibility List had been individually interviewed by the VSA examiner, who had two goals in mind: to exonerate the innocent/identify the guilty and to obtain legally valid and independently verifiable confessions from those individuals who were unable to clear the VSA process. Each interview had been conducted according to a standard protocol in which the wording of the interview, but not the method, was adapted on-site to each specific case. This procedure consisted of six steps, which are outlined in Table 1.

If a confession was made by the subject, the examiner asked the subject to further support his/her confession by verifying specific details of the events under investigation or by providing additional details concerning the events under investigation. False confessions are by no means unknown in law enforcement and legal circles, and it was imperative that the confessions be independently verified and validated [5]. This was accomplished by asking the subject to confirm evidence which had not been made public, and to provide a narration of the event. Any newly obtained information or case specific facts provided during a confession would be checked closely against all available evidence. Additionally, if a confession occurred, a written statement was also taken from the subject. A subsequent VSA examination was then conducted to validate the veracity of the written statement. At the conclusion of the VSA examination process, all findings and work product were turned over to the requesting agency for their use as appropriate.

Table1: Six Steps of the Standard Procedure used for Interviews

Step	Process
1.	VSA examiner briefed by requesting authority
2.	Pretest interview with subject conducted (audio recorder used)
3.	Initial VSA questions asked (9-31 questions, yes/no answers)
4.	Processing of answers with VSA and discernment of stress patterns
5.	Retest, as required, using reformulated questions for those issues where stress was observed until no stress was observed or stress could not be eliminated
6.	Outcome (A): "No Stress Indicated" Conclusion = cleared subject Outcome (B): "Stress Indicated" Conclusion = post-exam interview of subject to determine reason for stress

NOTE: **The only variability was the wording which was adapted to each case**

2.3   Vocal Stress Detection System

The two commercially available VSA systems used for the cases under study employed proprietary versions of the McQuiston-Ford VSA Algorithm, which had been found to be accurate in previous research [13], [16]. These systems detect involuntary and inaudible frequency modulations in the 8-14 Hz range. By use of proprietary signal filtering and discrimination techniques, the systems display the results as VSA graphs.

3.   **Results**

3.1 Overall Stress and Confession Rates

Each crime category was analyzed for its indicated rates of stress/no stress and confession/no confession. In each of the cases reviewed here (n=236), inclusive of (n=329) confession possibilities, stress was indicated in 92% of the examinations (n=303), leaving 8% of the exams with a no-stress result (n=26).   Confessions were obtained from 89% of the interviewees (n=292), leaving an overall 11% no-confession rate (n=37). Most notably, among all interviews conducted, where stress was indicated, 96.4% resulted in suspects making self-incriminating confessions (Table 2).

Table 2: Breakdown of 329 Interview Rates of Stress and Confesstion

	Stress Indicated			No Stress Indicated			Confession			No Confession		
	n	Category (%)	Total (%)	n	Category (%)	Total (%)	n	Category (%)	Total (%)	n	Category (%)	Total (%)
Murder	56	93.3	17.0	4	6.7	1.2	48	80.0	14.6	12	20.0	3.6
Rape	52	100.0	15.8	0	0.0	0.0	51	98.1	15.5	1	1.9	0.3
Grand Larceny	30	61.2	9.1	19	38.8	5.8	30	61.2	9.1	19	38.8	5.8
Burglary	30	100.0	9.1	0	0.0	0.0	30	100.0	9.1	0	0.0	0.0
Sexual Abuse	28	96.6	8.5	1	3.4	0.3	28	96.6	8.5	1	3.4	0.3
Larceny	15	100.0	4.6	0	0.0	0.0	15	100.0	4.6	0	0.0	0.0
Arson	19	100.0	5.8	0	0.0	0.0	18	94.7	5.5	1	5.3	0.3
Assault	16	100.0	4.9	0	0.0	0.0	16	100.0	4.9	0	0.0	0.0
Robbery	10	90.9	3.0	1	0.3	0.3	10	90.9	3.0	1	9.1	0.3
Sodomy	5	100.0	1.5	0	0.0	0.0	5	100.0	1.5	0	0.0	0.0
Child Abuse	5	100.0	1.5	0	0.0	0.0	5	100.0	1.5	0	0.0	0.0
Armed Robbery	5	100.0	1.5	0	0.0	0.0	5	100.0	1.5	0	0.0	0.0
Misconduct	4	100.0	1.2	0	0.0	0.0	4	100.0	1.2	0	0.0	0.0
Criminal Mischief	3	100.0	0.9	0	0.0	0.0	3	100.0	0.9	0	0.0	0.0
Weapons	3	100.0	0.9	0	0.0	0.0	3	100.0	0.9	0	0.0	0.0
Narcotics	3	100.0	0.9	0	0.0	0.0	3	100.0	0.9	0	0.0	0.0
Fraud	3	100.0	0.9	0	0.0	0.0	3	100.0	0.9	0	0.0	0.0

Indecent Assault	3	100.0	0.9	0	0.0	0.0	3	100.0	0.9	0	0.0	0.0
Bomb Threats	2	100.0	0.6	0	0.0	0.0	2	100.0	0.6	0	0.0	0.0
Sexual Contact	2	100.0	0.6	0	0.0	0.0	2	100.0	0.6	0	0.0	0.0
Kidnapping	2	100.0	0.6	0	0.0	0.0	1	50.0	0.3	1	50.0	0.0
Manslaughter	1	100.0	0.3	0	0.0	0.0	1	100.0	0.3	0	0.0	0.0
Coercion	1	100.0	0.3	0	0.0	0.0	1	100.0	0.3	0	0.0	0.0
Attempted murder	1	100.0	0.3	0	0.0	0.0	1	100.0	0.3	0	0.0	0.0
Attempted Rape	1	100.0	0.3	0	0.0	0.0	1	100.0	0.3	0	0.0	0.0
Missing Person	0	0.0	0.0	1	0.3	0.3	0	0.0	0.0	1	100.0	0.3
Felony DWI	1	100.0	0.3	0	0.0	0.0	1	100.0	0.3	0	0.0	0.0
Buying Testimony	1	100.0	0.3	0	0.0	0.0	1	100.0	0.3	0	0.0	0.0
Perjury	1	100.0	0.3	0	0.0	0.0	1	100.0	0.3	0	0.0	0.0
TOTAL	303			26			292			37		
% of total	92			8			88.8			11		

NOTE: Confessions Obtained when Stress Indicated = 292/303 = 96.4%

3.2   The Link between Stress and Confession in Crime Categories

To determine the one-tailed probabilities of this study's hypo-geometric distributions between stress/no stress and confession/no confession rates, the Fisher's Exact Test was carried out within each crime category and among pooled data. The analysis revealed significant deviations from the null hypothesis in the crime categories of murder (p=0.001, FET), grand larceny (p=0.0001, FET), sexual abuse (p=0.0345, FET), and for pooled data in other crime categories (p=0.0001, FET).

Within the crime category of grand larceny, one particular case involved n=20 suspects. Of the latter, n=19 were cleared by VSA testing (i.e., no stress indicated), whereas n=1 resulted in a stress indicated determination. A confession was obtained from the one subject who displayed stress. The Binomial Probability of having 20 successful evaluations in this case alone was found to be: $b(x; n, P) = 9.537e^{-7}$ (20; 20, 0.5), with the mean of the distribution $\mu_x=10$, the variance $\sigma^2_x=5$ and the standard deviation $\sigma_x=2.236$.

Therefore, among the categories of murder, grand larceny, and sexual abuse, and for the study as a whole, the results revealed the probability was significantly superior to chance, and the variables were interdependent.

3.3   Accuracy and Efficacy of the VSA Test in the Field

As a decision support tool, based on the data extracted (n=329) from this field study, the accuracy and efficacy of the VSA were evaluated. Calculations were based on: Prior Odds (11.048), Likelihood Ratio (27.027), Posterior Odds (298.6), and Posterior Probability (0.9967). The results revealed that a population was tested where 91.7% (n=302) of the participants were deceptive. Of those tested who were deceptive, 100% had a positive result. When a positive result was obtained, there was a PPV = 99.67% chance that the participant was deceptive, leaving a 0.33% chance of a false positive result. When a negative result was obtained, there was a NPV = 100% chance that the participant was not deceptive, leaving no chance of a false negative result.

3.4 Correlating Confessions of the Guilty With Consequences of Crime

Confessions among the guilty were grouped in one of three categories, according to the severity of typical sentencing for the crime committed (Table 3). The number of guilty found for each crime was pooled according to rating category, such that the total for each category was as follows: n=53 (Rating 3), n=62 (Rating 2) and n=64 (Rating 1). The number of confessions that ensued in each crime category was also pooled, such that the number (and % among guilty) in each category was as follows: n=47 (88.68%) in Rating 3, n= 61 (98.4%) in Rating 2, and n=64 (100%) in Rating 1. When correlating crime consequence ratings with percent of confessions among the guilty, the Pearson's Coefficient was found to be r = -0.94 (r² = 0.88), indicating a very strong, indirect relationship (Table 3). Only categories were considered and analyzed where the sourcing guidelines were well-

Table 3: Confessions of Guilty Correlated with Crime Consequences

Typical Sentence	Severity	Rating	Guilty "n"	Confession "n" (%)	Crime Types
20 years to life	high	3	53	47 (88.68%)	murder
5-20 years	medium	2	62	61 (98.4%)	kidnapping, sex abuse, arson, manslaughter, weapon, robbery
< 5 years	low	1	64	64 (100.0%)	burglary, assault, fraud, larceny
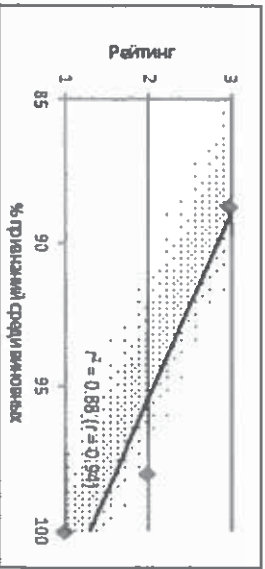
NOTE: All categories in this particular analysis excluded alleged victims and contract criminals (see Results section). Crime Consequences (average sentencing) were extracted from reputable federal sourcing guidelines [3, 4, 15].

documented and regulated [3, 4, 15]. Contract criminals were excluded from this particular analysis, as this special type of offender is known to reject confessions, due to organized crime affiliations, etc., regardless of what their VSA results or the evidence indicate.

4.   Discussion of Results

This study's confession rate of 96.4% (when stress was indicated), is laudable in being much greater than the confession rates (50% or less), typically obtained as a result of traditional interview and interrogation procedures, and also notably exceeds the results achieved by other widely available truth verification technologies which, according to the US National Academy of Sciences, are prone to high false positive rates and significant inconclusive results [10, 14].

The 100% sensitivity and 96.3% specificity rates of this study imply that the VSA process can precisely and accurately discriminate stress from no stress in real life crime situations involving consequence and jeopardy, thus enabling the exoneration of the innocent. For 100% of the VSA examinations which resulted in No Stress Indicated (n=26, 7.9% of total examination pool), the individuals represented were exonerated from any wrongdoing based upon confessions obtained from other suspects, evidence developed after the VSA examination, or acquittals at trials. Also, the accurate rates of successful evaluations defied chance probabilities. As a key example, in the Grand Larceny case with 20 suspects, 19 of the examinations resulted in No Stress Indicated, and only one resulted in Stress Indicated – which in turn resulted in a confession. The Bernoulli Probability of having had 20 successful evaluations out of 20 examinations was less than 1 in 1,000,000. If VSA were simply a prop to obtain confessions, it would have been virtually impossible to achieve such specific and unerring results.

Interestingly, a relevant portion of this retrospective analysis implies that there appears to be a strong, indirect relationship between crime consequence/jeopardy and confession rates. The correlation found ($r^2 = 0.88$, $r = -.94$) implies that guilty examinees were less likely to confess when the penal

ramifications (i.e., typical prison sentence) for the crime committed became more severe. This finding further demonstrates the efficacy VSA has when used in an experimentally realistic paradigm and underscores the ability of field researchers to discern trends and associations among "real-life" factors.

5. Implications and Conclusions

This retrospective study provides compelling evidence that when VSA is utilized as an investigative decision support tool in accordance with required operating procedures, and standard VSA interviewing techniques are employed, elicited confessions from criminal suspects can strongly be predicted based upon results of their VSA examinations. Further, VSA can be used by trained professionals to support the acquisition of court admissible criminal confessions at a rate superior to other legal interrogation methods currently employed by the criminal justice system. Ultimately, however, human skill is required to make VSA technology perform its most valuable investigative functions, to exonerate the innocent or to elicit valid and verifiable confessions from the guilty in real-world criminal investigations.

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Summary

The use of Voice Stress Analysis (VSA) technology in Criminal Justice Setting is considered. Practical evidence of the effectiveness of this technology for the investigation of various criminal offenses is provided.

18-Year Field Study Validates Computer Voice Stress Analyzer as Most Accurate Truth Verification Technology

Independent, peer-reviewed research validates accuracy of the CVSA

LEWES, Del., May 6, 2014 /PRNewswire/ — According to the National Association of Computer Voice Stress Analysts (NACVSA), a recently published research study in the 2012 annual edition of the scientific journal Criminalistics and Court Expertise reports the accuracy rate of the Computer Voice Stress Analyzer (CVSA®) is greater than 95%, an assertion long made by the system's manufacturer. The study's results are further bolstered by current US Government funded voice analysis research, which has established voice technologies performed well for border security applications.

The CVSA has been available to law enforcement agencies in the US since 1988, first as an analog device, and since 1997 in a digital version. The CVSA is the only Voice Stress Analyzer in the world with two US Patents and the only system worldwide incorporating the FACT® scoring algorithm, which uses scientifically validated processes to reliably and precisely evaluate the results of CVSA examinations. The CVSA is now used by close to 2,000 law enforcement agencies including major metropolitan agencies such as Atlanta, Nashville, Miami, Baltimore, and New Orleans as well as the U.S. Federal Courts. The California Highway Patrol has used the CVSA for over 15 years and it is now the most widely used truth verification system in the US.

Other advantages of the CVSA are that, unlike the old polygraph, there are no known countermeasures to defeat it and it has no inconclusive results. Additionally, drugs don't affect it and it can be used in virtually any environment.

The 18-year field study was conducted by Professor James L. Chapman and titled "Long-Term Field Evaluation of Voice Stress Analysis In a North American Criminal Justice Setting." Professor Chapman was known as the world's foremost authority on the application of Voice Stress Analysis technologies. Recently deceased, Professor Chapman's career spanned over 40 years as a criminologist, educator and researcher, during which he conducted more than 15,000 Voice Stress Analysis examinations. The study's co-author, Marigo Stathis, a neuroscientist and research analyst, has been the primary or co-author of 27 published scientific articles and studies focusing on various topics related to the human brain and biology.

Professor Chapman used the CVSA to conduct the research and the results achieved were highly consistent throughout the period the study's data were collected. The study's findings revealed the CVSA, when used as an investigative support tool, can accurately predict whether a person under investigation is being truthful or deceptive. The study's findings are supported by scientifically accepted statistical models, and by the 96.4% validated confession rate Professor Chapman attained during the course of the 18-year study. According to current scientific research and meta-analyses, police confession rates worldwide vary between 20-45%, with even the most experienced police interviewers only achieving a 50-55% confession rate. Empirical data collected by the CVSA's manufacturer, US law enforcement and US military CVSA users have long supported such findings; however, this is the first independent and peer-reviewed scientific study to validate these data. Additional studies and research are planned for the future.

For further information on the NACVSA, email Diana.

Phone: 888-358-5025

NITV
FEDERAL SERVICES

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CVSA III NOW AVAILABLE

ANNOUNCEMENT – Due to the worldwide Coronavirus crisis, we have been advised Dell Rugged 14 notebooks are not available until further notice. The CVSA III will continue to be available, housed in the business-grade Dell Latitude 5400. For further information please **contact us**.

world... CVSA is the only scientifically validated voice stress analyzer in the world and is validated to be 98% accur

Exhibit 9

as it previously contended that CVSA was considered an expensive prop "according to almost all law enforcement types who bought it."

58.   This statement is false as nearly 2,000 law enforcement agencies worldwide are utilizing the CVSA system, including approximately 175 agencies in Florida alone.

59.   The Dektor website further states that: "CVSA, its training and chart analysis techniques have not shown proven reliable accuracy better than about 50% in studies and real crimes." (available at http://www.dektorpse.com/information/cvsa/).

60.   This statement is false. As explained above, a 2012 peer-reviewed and published study of the CVSA showed its error rate to be less than 1%. Further, a 2007 U.S. Department of Defense survey of law enforcement users of the CVSA found that approximately 86% of the respondents indicated they thought the CVSA was either "very" or "extremely" effective in detecting stress.

Exhibit 10

Arthur Herring III

From:	Daniel DeSouza <ddesouza@desouzalaw.com>
Sent:	Tuesday, February 4, 2020 5:36 AM
To:	Arthur Herring III
Cc:	James D'Loughy - Advisor Law PLLC (JDLOUGHY@advisorlaw.com); Denise Aguilar
Subject:	RE: chapman study

Mr. Herring,

I have not responded to your prior e-mails on the subject because, as you know, the Court entered final judgment against you and Dektor on December 16, 2019 (you know this because you also continue e-mailing me questions about when the judgment will be 'transferred' to Pennsylvania so you can file yet another bankruptcy). That judgment was largely influenced by what the Court deemed severe/significant misconduct by you throughout the case.

Because judgment has been entered, the case is over and there is no mechanism, basis, or requirement for you continuing to seek answers with respect to the substance of the case. The time for questions such as the one below was during the case, but you were apparently too busy destroying e-mails, creating secret e-mail accounts, etc. to substantively participate. That said, you have asked this question before and I have previously responded that neither I nor NITV has the contact information you're requesting. In fact, you were allowed extensive time during the evidentiary hearing on December 10, 2019 to argue your position, to testify yourself (which at first you refused to do), and to cross-examine NITV's witness (Charles Humble). You asked several questions to Mr. Humble himself with respect to the Chapman study and were told the same I previously conveyed to you – NITV does not have the contact information of the publisher and was not involved in the preparation of the Chapman study.

Although I certainly have no control over your actions, I would ask that you stop cluttering my inbox with the same e-mails for which no response is needed. You've already received answers to your questions multiple times, and continuing to ask the same question is not going to yield a different result. The case is over, and all that remains is post-judgment collection issues and your ongoing compliance with the permanent injunction that has been entered against you (which you previously stated in writing (in your filings in the lawsuit) that you would not comply with and that you would continue sending the e-mails to law enforcement/government agencies that you've been ordered to stop. Again, I have no control over your actions, but I would hope you have ceased that activity so that we don't need to pursue the matter any further by filing a motion for contempt.

Daniel DeSouza

DeSouza Law, P.A.
3111 N. University Drive | Suite 301 | Coral Springs, FL 33065 (Mailing Address)
101 NE Third Avenue | Suite 1500 | Fort Lauderdale, FL 33301
954.603.1340 (office) | 954.551.5320 (mobile)
ddesouza@desouzalaw.com | www.desouzalaw.com

From: Arthur Herring III <admin@dektorpse.com>
Sent: Monday, February 3, 2020 11:04 PM
To: Daniel DeSouza <ddesouza@desouzalaw.com>

1

From: Daniel DeSouza <ddesouza@desouzalaw.com>
Date: January 16, 2019 at 6:49:41 AM EST
To: Scott Wellikoff <swellikoff@advisorlgroup.com>, JAMES D'LOUGHY <JDLOUGHY@advisorlaw.com>
Subject: RE: FORENSIC ANAYSIS

Scott,

I can't agree in advance that all hardware remain on premises. Nobody knows the condition of the damaged laptop hard drive or whether it can be imaged on premises. I'm willing to agree that any hardware removed by the expert remains in the possession of the expert until returned to your client, but I'm not going to hamper the forensic review based on your client's paranoia. That's non-negotiable from my perspective.

Here's the problem with the "non-relevant, personal materials" — you're obligated to give me a privilege log of each document withheld from us. We're talking about a laptop hard drive with years of your client's musings. Is he going to pay you to draft a privilege log of tens of thousands of items within the span of a week? You can insist on it, but I'm going to hold your feet to the fire and require you to specifically identify every document you're withholding (date, author, recipient, subject, basis for withholding, etc.). That doesn't seem like a particularly efficient use of your time or your client's money, but that would be the requirement under the order you've circulated. And your client obviously can't be the one making the judgment call on what is personal/non-relevant given that his game playing is what got us here in the first place. So that means you being required to put eyes on every document and every e-mail collected as part of the review.

Today, please let me know your position on these 2 items. I'd rather submit a joint order, but I'm happy to submit competing orders with an explanation as to the differences. I want to submit the order(s) by end of day today.

Daniel DeSouza
DeSouza Law, P.A.

Exhibit 12

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF FLORIDA

Case No. 9:18-cv-80994-DLB

NITV FEDERAL SERVICES, LLC,

Plaintiff,

v.

DEKTOR CORPORATION and ARTHUR
HERRING, III,

Defendants.

_____

**PLAINTIFF'S MEMORANDUM IN OPPOSITION
TO MOTION TO DENY CLAIM OF DAMAGES**

Plaintiff NITV Federal Services, LLC ("Plaintiff") hereby files this memorandum in opposition to defendant Arthur Herring, III's ("Herring") Motion to Deny Claim of Damages (the "Motion") [D.E. 145], and states as follows:

1.   The Motion is the latest diatribe/attack piece from Herring. This time, Herring wedges an assault on Plaintiff's damages in the midst of his familiar personal insults/attacks and appears to argue that the Court should reduce or entirely disallow the damages being sought by Plaintiff in its pending Motion for Default Final Judgment [D.E. 135].

2.   The Motion is improper and does not merit a response. First, as with Herring's other filings, the Motion is devoid of the requisite Local Rule 7.1(a)(3) certification (as Herring has *never* conferred with undersigned counsel on *any* of his multitude of motions). Second, and more importantly, the Motion is essentially a rehash of Herring's Objection to Plaintiff's Final Default Judgment and Permanent Injunction Against Defendants [D.E. 138]. Plaintiff has already responded fully to Herring's arguments stated therein in Plaintiff's reply memorandum in support

of its default judgment motion [D.E. 140]. In the interest of judicial economy, no further

substantive response to Herring's ramblings is necessary.

WHEREFORE, Plaintiff respectfully requests that the Court enter an Order denying the

Motion and for such further relief as the Court deems proper.

Respectfully submitted   Respectfully submitted,

By:/s/ James D'Loughy   By: /s/ Daniel DeSouza, Esq.
James D'Loughy, Esq.   Daniel DeSouza, Esq.
Florida Bar No: 052700   Florida Bar No.: 19291

ADVISORLAW PLLC   DESOUZA LAW, P.A.
2925 PGA Boulevard   101 NE Third Avenue
Suite 204   Suite 1500
Palm Beach Gardens, FL 33410   Fort Lauderdale, FL 33301
Telephone: (561) 622-7788   Telephone: (954) 603-1340
Jdloughy@advisorlaw.com   DDesouza@desouzalaw.com

CERTIFICATE OF SERVICE

I hereby certify that on November 21, 2019, I electronically filed the foregoing document

with the Clerk of the Court using CM/ECF, which will electronically serve all counsel of record.

I further certify that on November 21, 2019, I served the foregoing document via US Mail to

Dektor Corporation and Arthur Herring, III, 400 E. Station Avenue, Coopersburg, PA 18036 and

via e-mail to admin@dektorpse.com.

/s/ Daniel DeSouza
Daniel DeSouza, Esq.

4841-1795-7485, v. 1

2

Knowingly making defamatory statements in court records can be grounds for disbarment. Jack Thompson, a Miami lawyer who campaigned against violent video games and the group 2 Live Crew, was disbarred for professional misconduct that included making defamatory statements.

SEP 17 2020

Exhibit 14

-------- Original message --------

From: Daniel DeSouza <ddesouza@desouzalaw.com>

Date: 6/1/19 2:35 PM (GMT-05:00)

To: Matt Vanderhoff <mvanderhoff@vanderson.net>

Cc: "James D'Loughy - Advisor Law PLLC (JDLOUGHY@advisorlaw.com)" <JDLOUGHY@advisorlaw.com>

Subject: NITV - FOR SETTLEMENT PURPOSES ONLY

Mr. Vanderhoff,

This e-mail is sent pursuant to Fed. R. Civ. P. 408 and is for settlement purposes only.

I recognize and respect your prior e-mails asking that we not contact you further regarding this matter, but unfortunately this e-mail needs to be sent and it is my hope that you review it carefully (preferably with your own legal counsel). Through our review of the documents produced during the forensic investigation, conclusions reached regarding the 'damaged' hard drive, and positions taken by Mr. Herring concerning ownership of the PSE intellectual property, it is our intention to file a Complaint against both you and Vanderson Corporation in the United States District Court for the Southern District of Florida for aiding and abetting Mr. Herring in his tortious activities and for conspiring with him to engage in such activity. Please note I am not sending this e-mail to convince you that we are right or to argue the point with you back and forth – the bottom line is that our client has pushed for a lawsuit to be filed against you and your company for some time now and we agree with our client's position.

That said, I am not looking for my client to spend more money on this matter than necessary. My expectation is that the lawsuit with Mr. Herring will soon be over, with a monetary judgment against both Dektor and Herring and a permanent injunction entered. We are awaiting dismissal of Mr. Herring and Dektor's bankruptcy cases before we proceed in that manner. Given the above, we have 2 choices on how to proceed here. The first option is you ignore this e-mail (your right to do so) and we proceed with suing you in Florida as we did with Mr. Herring. The second option (which I sincerely hope you give serious thought) is that we enter into a settlement agreement wherein NITV will exchange mutual releases with you and Vanderson (with no money to be paid by you or judgment entered against you) in exchange for: (a) the transfer of any ownership or use rights you may have in the PSE software/intellectual property/source codes etc. to NITV and (b) the agreed entry into a permanent injunction that prohibits you from further assisting Mr. Herring with his anti-NITV activities (with a liquidated damages provision in the event of a violation). We would need to agree on the language and other material terms, but that is the gist of what my client will accept in lieu of filing a lawsuit against you and seeking a money judgment therein. The above would also be contingent on the Court allowing entry of an injunction against you as a non-party – if not, we would probably need to file a lawsuit with agreement to immediately dismiss it upon entry of an injunction.

Again, I encourage you to review this with counsel, but understand that we are poised to move forward with the lawsuit if you are not willing to settle along the above terms. If you are interested, please let me know by Wednesday, June 5 at the latest. If I do not hear back from you by then, we will proceed with the lawsuit.

Exhibit 15
SEP 17 2020

Daniel DeSouza

DeSouza Law, P.A.

3111 N. University Drive | Suite 301 | Coral Springs, FL 33065 (Mailing Address)

101 NE Third Avenue | Suite 1500 | Fort Lauderdale, FL 33301

954.603.1340 (office) | 954.551.5320 (mobile)

ddesouza@desouzalaw.com | www.desouzalaw.com

ADVISORLAW
ATTORNEYS & COUNSELORS AT LAW

June 17, 2019

Via E-mail: antipolygraph.org@protonmail.com

AntiPolygraph.org
c/o G.W. Maschke
Else Mauhslaan 39
2597 HA The Hague
The Netherlands

RE: **ORDER AND PERMANENT INJUNCTION**

NITV Federal Services, LLC. v. Dektor Corporation and Arthur Herring, III
United States District Court, Southern District of Florida
Case No. 9:18-cv-80994 ("Lawsuit")

Dear Mr. Maschke:

The undersigned represents NITV Federal Services, LLC and its President, Dr. Charles Humble. As the sole owner and publisher of Antipolygraph.org, we are writing you concerning the following twelve web links hosted through Antipolygraph.org:

1. https://antipolygraph.org/blog/2019/05/19/federal-judge-orders-immediate-removal-of-website-critical-of-computer-voice-stress-analysis/

2. https://antipolygraph.org/blog/2018/07/31/nitv-hires-disgraced-ex-cop-jerry-w-crotty-ii-as-director-of-law-enforcement-operations/

3. https://antipolygraph.org/cgi-bin/forums/YaBB.pl?num=1263627833/3

4. https://antipolygraph.org/blog/tag/cvsa/

5. https://antipolygraph.org/blog/

6. https://antipolygraph.org/blog/2018/07/08/nailing-the-pretest-interview-a-presentation-by-skip-webb/

7. https://antipolygraph.org/blog/category/voice-stress/

Exhibit 16

SEP 17 2020

G.W. Maschke
AntiPolygraph.org
June 17, 2019
Page 2

8. https://antipolygraph.org/cgi-bin/forums/YaBB.pl?num=1298124260

9. https://antipolygraph.org/blog/2009/03/12/baker-dvsa-loses-a-customer/

10. https://antipolygraph.org/cgi-bin/forums/YaBB.pl?action=RSSboard&board=cvsa

11. https://antipolygraph.org/blog/?s=cvsa

12. https://antipolygraph.org/blog/2019/06/06/nitv-threatens-competitors-it-consultant-with-federal-lawsuit/

The foregoing web links are being hosted in violation of the Court's May 17, 2019 Order and Permanent Injunction ("Order") entered in the above referenced case whereby it prohibits the publishing or posting of any website, blog, or other writing accessible via the internet which contains any false or disparaging remarks or statements about NITV, its CVSA product, or Dr. Charles Humble. For a detailed description of the injunction, you should refer to pages 16 through 18 of the Order which is attached hereto.

As such, you are required to permanently remove the above referenced offending web links and any other web links or materials that are governed under the Order. In addition, you are required by the Order to immediately forward a copy of this letter to all other persons or companies with custodial responsibilities to ensure compliance with the Order.

Last, you are also requested to reply to the undersigned to confirm compliance with the Order within ten (10) days of your receipt of this letter.

ANTIPOLYGRAPH.ORG'S FAILURE TO FULLY COMPLY WITH THE ORDER AND PERMANENT INJUNCTION MAY RESULT IN THE COURT IMPOSING SEVERE SANCTIONS AGAINST ANTIPOLYGRAPH.ORG.

We look forward to your written notification of compliance with the Court's Order. Thank you in advance for your cooperation.

Very truly yours,

James D'Loughy

JDD/da

Enclosure: May 17, 2019 Order and Permanent Injunction

2925 PGA BOULEVARD, SUITE 200
PALM BEACH GARDENS
FLORIDA 33410, USA

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F +1-800-734-5289
WWW.ADVISORLAW.COM

ADMITTED TO PRACTICE:
FLORIDA, GEORGIA
& DISTRICT OF COLUMBIA

- The NITV CVSA Scam
- Fake NITV CVSA Study Exposed
- NITV's Fake CVSA Study Revealed
- NEW: Dirk Bells Lies About Dektor For NITV
- NEW: Dirk Bells Lies & Threatens Dektor For Humble
- NEW: "Insane" Dirk Bells Lies & Threatens Dektor For Humble
- NEW: NITV Owner Kane Promises CVSA Accuracy 99%
- NEW: NITV Humble Bought Fake Doctor Title From Fake University
- NEW: NITV Humble Bought Fake Doctor Title From Fake University
- NEW: NITV Disgraces Great Seal of U.S. & Lies To Customers for Monetary Profit
- NEW: How Could NITV Staff Past and Present of Former High Level Law Enforcement Sell and Train Cvsa With No Study
- Proving CVSA Accuracy?
- NEW: Library of Congress Says Journal of Chapman Study Does NOT Exist
- NEW: NITV Threatens Dektor With Lawsuit 15 Years Ago
- NEW: Major Article Reveals Many Lies About NITV & CVSA
- NEW: "Crazy" Dirk Bell Sends Letter to Humble in 2004 About Herring
- NEW: Dektor's Lawyer Orders Dirk Bell to Stop Harassment, But Bell Ignores
- NEW: Fake Humble "Doctor" Title by Fake University
- NEW: NITV's Humble Owed Huge Debt to Collection Business For 4 Years
- NEW: NITV Posts Groveport Police Lies About Dealing With Dektor
- NEW: When CVSA Buyers Purchase CVSA, NITV Does NOT Let Them Own It
- NEW: Humble Claims CVSA 98% Accurate Despite NO Studies Proving It
- NEW: Humble Convicted in 1988 of Copyright Fraud
- NEW: NITV Says in Court CVSA Not a Lie Detector, but NITV Website Says It Is
- NEW: Disgusting Lies About Dektor & Owner Sent Twice by NITV to Law Enforcement
- NITV Hires Disgraced Ex-cop
- NITV Promotes Incompetent Disgraced Ex-cop as Director
- NITV Uses Fake DoD "Survey" to Sell CVSA
- NITV Lies About DoD CVSA Study
- Humble Lied! NO DoD Funded Study Ever Validated CVSA
- NITV CEO Charles Humble Dedicates a Website to Himself
- Humble Pretends National Company Wanted Him to Invent Their New Voice Lie Detector
- ABC News Video Exposes NITV/CVSA Scam
- Primetime Investigation Prove NITV/CVSA Lies
- Groveport Police Lied about Dektor
- Groveport Mayor & City Council Ignore Police Fake Lie Detector
- NITV Owner Lied About Inventing New Lie Detector
- Major Law Enforcement Association Protects NITV Scam
- Politicians & Law Enforcement Refuse To Stop NITV Scam
- Did NITV Bribe SOCOM?
- NITV LIES! CVSA Was Not PSE in Vietnam War
- NITV Found Guilty by U.S. Government

Exhibit 17

- Did NITV Bribe SOCOM?
- NITV LIES! CVSA Was Not PSE in Vietnam War
- NITV Found Guilty by U.S. Government
- SCAM! Computer Voice Stress Analyzer (CVSA) Sold for 8 Years NEVER Had a Computer!
- NITV Admits Never Inventing New Lie Detector
- Charles Humble Demands Promise Not To Sue Him
- Charles Humble Admits NO Study Proves CVSA Accuracy
- NITV Owes Massive Judgement
- Dirk Bell Lies About Dektor
- NITV Lets Dirk Bell Lie About Dektor & It's Owner
- Newsmedia Quotes About NITV, CVSA & Humble
- Humble Sanctioned by US Commerce Department for Export Violations
- Ex CVSA Users Condemn CVSA & Training

Arizona Republic 10/10/05

Exhibit 18

LAW ENFORCEMENT

Arguments rage over voice-stress lie detector

By Dennis Wagner
THE ARIZONA REPUBLIC

At least 20 Arizona law enforcement agencies are relying on a voice-measuring lie detector for criminal investigations even though experts say the device does not stand up to scientific scrutiny and may prompt innocent suspects to make false confessions.

The Computer Voice Stress Analyzer, or CVSA, purportedly measures FM radio waves produced by muscles around the larynx. Deceptive answers cause stressful "micro-tremors" in the voice that are, charted by the device's software program, the manufacturer says.

Yet, independent experts have consistently found the in-

See CVSA Page: A14

CVSA
Continued from A1

strument to be dubious, at best, when it comes to separating truth from lies. And, while increasingly more police agencies are using it to interrogate suspects and assess witnesses, they don't use the machine for internal investigations or to screen recruits.

The Department of Defense Polygraph Institute concluded that CVSA produced "dismal results" and "no examiner did better than the chance level."

Two years ago, the National Academy of Sciences reviewed voice-stress studies and concluded there is "little or no scientific basis" to consider the device an alternative to polygraph machines.

And a report done for the International Association of Chiefs of Police found: "Whatever the CVSA may record, it is not stress. … The poor validity for the current voice stress technology should provide a caveat to agencies considering adding voice stress to their investigative toolboxes."

Despite those critiques, the company behind CVSA claims its device is more accurate than a polygraph machine, and has solved hundreds of crimes across the country.

Charles Humble, chairman and chief executive officer of the business known as National Institute for Truth Verification, said voice-stress technology helps detectives target the bad guys during investigations, and clears innocent suspects who might otherwise remain under suspicion. It also is used to check witnesses' veracity.

"We believe the system is 100 percent accurate," Humble added.

Widespread popularity

According to the institute, 1,400 American law enforcement agencies have purchased Computer Voice Stress Analyzers in recent years, at $10,760 per machine.

The device is purportedly used in Iraq by counterintelligence forces and at the military's terrorism d, ention cen-

ter in Guantanamo Bay, Cuba.

In Arizona, it is employed by the state Department of Public Safety, Maricopa County Sheriff's Office and police in Mesa, Glendale, Gilbert and Avondale, to name a few. It also has been used in training programs at Fort Huachuca, the Army's intelligence training center in southern Arizona.

The institute's literature identifies research works that seem to endorse the instrument. One study found "100 percent agreement between CVSA and the polygraph." Another concluded it is "accurate when utilized as a truth verification device, and produced a confession rate of 94.8 percent."

Humble acknowledged, however, that no independent testing has demonstrated the machine's integrity. He claimed CVSA cannot be evaluated under laboratory conditions because stressful deviations occur only when an interrogation subject is afraid of prison or the death penalty.

"We never really had the funding to do that, to take it to a university and pay for all the researchers," he said.

Competes with polygraph

Peoria police Detective Tom Stewart, who has administered dozens of CVSA exams, said suspects often crack when told they are facing a foolproof deception-detector.

"I don't know if this thing works," Stewart admitted. "But it works for me in getting people to see the light. … They deny doing it right up to the point of me asking the first question. Then they break down and say, 'You don't need to do the test. I'm guilty.'"

Before CVSA, Stewart said, police departments had to pay $150 for private polygraph exams or wait days for state examiners to be available. With voice-stress testing, he said, getting confessions is faster, cheaper and easier.

CVSA technology is based on research first conducted by the Army four decades ago. A pair of retired officers took their findings to the public in 1970

OCTOBER 31-NOVEMBER 6, 1988 • INDIANAPOLIS BUSINESS JOURNAL • 3A

Rock Island, others slapped with judgment in lie-detector case

11/6/88

BY JOHN KETZENBERGER

Two subsidiaries of Rock Island Refining Corp. and several individuals were found guilty of copyright infringement in a case that stems from administering written examinations to prospective service-station employees.

U.S. District Court Judge William E. Steckler fined United Oil Service Inc.; R.I. Marketing Inc.; Richard Jones, United's vice president; and Charles W. Humble and Gary L. Nelson, both independent psychological-stress examiners, nearly $61,800 for copying a written examination developed and copyrighted by Reaume & Associates Inc.

A motion by the defendants to reconsider the decision was rejected by Steckler, and Christopher Braun, an attorney for United Oil, said the company is considering an appeal. The defendants have until Nov. 18 to decide whether to make an appeal.

The judge ruled that the defendants should pay $30,000 in statutory damages to Reaume for copying and using the written test without permission from the authors, Henry J. and Ann Reaume. The remainder of the judgment covers costs and attorney's fees.

The Reaumes were hired in July 1979 by United Oil to conduct voice-stress evaluations on prospective service-station employees. United Oil subsequently purchased several hundred copies of a written test developed by the Reaumes called ASSIST, which received copyright and trademark protection in 1979.

In June 1980, United Oil hired Charles Humble to replace the Reaumes and conduct voice-stress exams on prospective employees, those seeking promotions and those suspected of specific acts. According to court documents, at some point between 1980 and 1983, United VP Jones gave Humble several copies of the ASSIST test, customized to United's specifications, to use in conjunction with the voice tests.

Humble used the ASSIST test until September 1985, when he concluded that the test had "limited value" in screening applicants based on theft, drug use and honesty criteria. It is unclear, however, how many times Humble used the test, because United Oil destroyed all of its business records for 1982 and 1983. At the same time, Humble destroyed all of his copies of invoices to United for the same two years, according to the court's findings.

Widespread copying of the test occurred beginning in 1983, when United and R.I. Marketing merged. The resulting addition of numerous service stations meant testing outside Humble's office, where it had previously occurred, and further copying and use.

United Oil...(conducted voice-stress exams on prospective employees.

The copying was discovered by the Reaumes in 1985, when Nelson, a former student of Humble's, offered to sell the ASSIST test to two other oil companies including another that was a client of the couple.

An out-of-court settlement of $2,010 plus costs was rejected by the Reaumes shortly after they filed suit in October 1985. Additional claims of unlawful trade practices, unfair competition and trademark infringement brought by the Reaumes against United Oil, R.I. Marketing and Jones were dismissed last August. •

INSIDE

Exhibit 19

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niemeiec 1 27 20	1/27/2020 10:01 AM	Outlook Item	29 KB
niemiec 1 23 20	1/23/2020 11:03 AM	Outlook Item	50 KB
niemiec 6 4 19	6/4/2019 11:38 AM	Outlook Item	50 KB
niemiec 6 16 19 ag no help	6/16/2019 10:05 PM	Outlook Item	30 KB
niemiec 6 16 19 do something	6/16/2019 10:06 AM	Outlook Item	30 KB
niemiec 7 10 19 fu	7/10/2019 6:46 PM	Outlook Item	32 KB
niemiec 7 10 19 threat	7/11/2019 8:55 AM	Outlook Item	32 KB
niemiec 7 10 19 want reply	7/10/2019 9:47 AM	Outlook Item	24 KB
niemiec 7 11 19	7/11/2019 9:32 AM	Outlook Item	39 KB
niemiec 7 12 19 any change	7/12/2019 12:36 PM	Outlook Item	25 KB
niemiec 7 15 19	9/4/2019 12:21 PM	Outlook Item	39 KB
niemiec 9 4 19 update	9/4/2019 12:39 PM	Outlook Item	24 KB
niemiec 10 15 19 huge docs	10/15/2019 9:59 AM	Outlook Item	78 KB
niemiec 10 17 19 nitv docs	10/17/2019 8:56 AM	Outlook Item	6,874 KB
niemiec 11 12 19 trial date	11/12/2019 12:41 ...	Outlook Item	26 KB
niemiec 11 18 19 court	11/18/2019 11:05 ...	Outlook Item	24 KB
niemiec 12 1 19	12/1/2019 9:47 AM	Outlook Item	34 KB
niemiec 12 5 19 court	12/6/2019 12:51 AM	Outlook Item	23 KB
niemiec 12 5 19 cvsa sales	12/5/2019 11:34 PM	Outlook Item	25 KB
niemiec 12 6 19 cpa analysis	12/6/2019 11:01 AM	Outlook Item	814 KB
niemiec bergman hides assetts	11/24/2019 10:22 ...	Outlook Item	77 KB
niemiec desousa 6 5 19	6/6/2019 7:56 AM	Outlook Item	31 KB
niemiec extortion email	6/7/2019 10:34 AM	Outlook Item	44 KB
niemiec marschke 9 17 19	9/17/2019 12:06 PM	Outlook Item	61 KB
niemiec nitv vanderhoff extortion	6/16/2019 10:19 AM	Outlook Item	23 KB

Exhibit 20

Exhibit 21

Alert:

NITV's Response To Dektor Flyer

Quite a few law enforcement agencies have received flyers from a company called Dektor, Lansdale, PA, concerning voice stress analysis and have requested a response. Unfortunately, the flyers contain false and misleading information that you should be aware of.

The voice stress analyzer (PSE) that Arthur Herring, a private investigator, is selling is used by very few, if any, law enforcement agencies. _In fact, Herring operates out of Lansdale, PA, and the Lansdale P.D. does not use Herring's PSE, they use the CVSA._ It is also unfortunate that Herring has a history of attempting to discredit the CVSA, NITV, and the NITV's founder, Dr. Humble.

It is also interesting to note that when the federal government recently decided to test voice stress analysis as a truth verification device in three separate studies, _they chose the most widely used and accepted voice stress analyzer, the CVSA, not Herring's PSE._ These studies are being conducted at the Air Force Laboratory, the University of Florida and at the University of Oklahoma. Additionally, many elements of the federal government use the CVSA, not Herring's PSE.

The original company named Dektor was the manufacturer of the Psychological Stress Evaluator (PSE), back in the 70's. However, because the owners did not keep up with the advances in technology and due to the fierce attacks by the polygraphers, they filed bankruptcy in 1984. After the owner passed away, Herring started his own voice stress analysis company and named it Dektor. Likewise, his voice stress analyzer is not the original PSE. Herring's literature claims to have a trademark on 'Voice Stress Analysis' and 'Filter-Scan.' A check of the trademarks shows that he has neither.

From his literature, it appears that the system that Herring is trying to sell is a very primitive voice stress analyzer that still requires the examiner to tape record the interview and then run each response through a laptop computer (not real-time analysis). It also appears that the computer displays only one response at a time.

Herring touts the fact that he requires NO re-certification/continuing education. Any examiner that is worth his or her salt will tell you that continuing education/re-certification is essential to the long-term success of conducting examinations and to not require it could be considered irresponsible. Additionally, examiners trained by the NITV may re-certify at any of the four regional associations' re-certification courses for a very nominal fee, not the "tens of thousands of dollars" that Herring mentions.

Herring also claims that imitators (anyone but Herring) use "Compensated" testimonials. The NITV lists all of our users on our Web site so that anyone may call to check how satisfied our customers are. Herring does not.

In conclusion, you may want to ask Herring why, after having the PSE on the market since 1970, there are few, if any, law enforcement agencies using it and there are more than 1,400 using the CVSA (this answer should be interesting). You may also want to ask him why the US Military and the interrogators at GTMO use the CVSA exclusively, not the PSE. You may also want to check Herring's credentials to reach law enforcement personnel.

NATIONAL INSTITUTE FOR TRUTH VERIFICATION

Law Enforcement Alert

Recently, a number of 'new' voice stress analysis devices were introduced into the market with claims such as being 'the DNA of thought'. The truth turns out to be that these are nothing more than old, failed vsa that have been repackaged in an attempt to capitalize on the huge vsa market created by the NITV's Computer Voice Stress Analyzer (CVSA™). Although they pass out specious 'studies' conducted by polygraphers that claim that the CVSA doesn't work, they fail to explain why more than 1,400 law enforcement and federal agencies, including the U.S Military, are now utilizing it.

The Truster (LVA)

It has come to our attention that the manufacturers of the Truster have now changed the named of their system (as have others in the past) and are calling it "Layered Voice Analysis" (LVA) - Same technology, new players. These individuals have launched a massive ad campaign to introduce their 'new' system in hopes of convincing unsuspecting departments or purchasing agents that they are getting the 'very latest in VSA technology.' However, the developers have admitted that the LVA/TiPi is the old Truster. In reality, they are getting the same system that declared that Bill Clinton was telling the truth when he said that he didn't have sexual relations with Monica Lewinsky.

A year ago we paid $149.00 for our Truster but they are available for as little as $29.00 (Skymall.com). However, if you want the 'latest' version', it will cost you $16,000.00, is sold by "y", and manufactured by Nemesysco in Israel (see our Web Site). None of the principles have any experience in truth verification. The developers claim that the Truster/LVA is "mapping the DNA of thought". In other words, it can read your mind. Nemesysco also manufactures the "Love Detector" (see their web site: www.nemesysco.com).

Diogenes Lantern

Alfred F. Starewich, Vice President of The Diogenes Group, Criminal Justice Division, manufacturers of the Diogenes Lantern, recently appeared for the defense in court in Sandusky, Ohio. Mr. Starewich was presented by the defense as a nationally recognized expert in voice stress analysis. Mr. Starewich had reviewed a videotape of a CVSA examination conducted by Lt. Jerrett of the Sandusky P.D. on an individual that was suspected of murder. The suspect had failed two CVSA exams and subsequently confessed to the murder.

Mr. Starewich was hired by the defense to review and critique the videotape of the exam. Mr. Starewich wrote a report that criticized the testing techniques taught by the NITV and utilized by Lt. Jerrett as being so fatally flawed as to render the exam invalid. The defense was attempting to utilize Mr. Starewich's testimony as cause to suppress the confession, which could have caused the defendant to walk.

We were contacted by the Sandusky P.D. just prior to the suppression hearing and requested to assist in countering Mr. Starewich's testimony. After writing a rebuttal to Mr. Starewich's report, we decided to explore the Expert Witness Qualification Credentials provided by Mr. Starewich

1. Mr. Starewich claimed that he had been the Chief Examiner for the Detective Division of the Burlingame P.D. (CA). Since the Burlingame P.D. Utilizes the CVSA, we contacted that agency and were told by that department's chief examiner that although Mr. Starewich did conduct a

number of PSE examinations for the department in the late 70's, he was never a sworn officer (the chief made him a Special Reserve) and certainly was not the "Chief Examiner". Additionally, shortly after he began conducting exams for that agency, he was arrested by the San Jose P.D. and charged with Solicitation to Commit Murder. Mr. Starewich was tried, convicted and served 3 years in prison for Conspiracy to Solicit Bodily Harm With A Deadly Weapon. (Mr. Starewich apparently failed to mention that on his Expert Witness form.)

2   Mr. Starewich also stated that he be was the Chief of Police of the St. Edwards University P.D. in Texas. We contacted the agency and were told that the university has only had a police department for ten years and that the recently retired chief had held that position for the entire time. The university stated that they had no record of Mr. Starewich being Chief of Police.

This was just a cursory investigation of Mr. Starewich's background. A more thorough review would possibly reveal additional information. Please retain this information in your records in the event Mr. Starewich appears in your jurisdiction attempting to portray himself as an Expert Witness. For further information concerning Mr. Starewich or The Diogenes Group, you may contact them at 775-825-5729.

Dektor

The rights to produce and market the original Psychological Stress Evaluator and the company name Dektor have been acquired by a private investigator, Arthur Herring III, located in Lansdale, PA. You may recall that Dektor is the company that originally developed voice stress analysis. Unfortunately, Dektor declared Chapter 11 bankruptcy in the mid-80's and never recovered nor did they move beyond the old analog PSE.

However, what is very disturbing is that Mr. Herring claims in his literature that "Your equipment must say PSE or you have a gadget that is lying to you and your examiners. If your examiners were not trained and certified by Dektor, they are not able to perform accurate lie detection tests utilizing Voice Stress Analysis."

Mr. Herring ignores the fact that the PSE is now not generally used in law enforcement and that there are nearly 1,400 agencies, including the U.S. Military, now utilizing the CVSA. He claims that any instrument other than the PSE is a fraud.

To conduct your own investigation of the PSE and inquire as to how many law enforcement agencies are actually still utilizing the PSE since its introduction in 1971, you may write to Mr. Herring at 642 Cowpath Rd, Lansdale, PA 19446, or call him at 215-631-1648. You may also find it interesting that the Lansdale P.D. (PA) utilizes the CVSA.

Baker DVSA

Gary Baker, a private investigator, left the employment of The Diogenes Group in 2002 and introduced his own VSA which is very similar to the Diogenes Lantern. Baker gives away the software in the form of a "grant". If the agency will pay $1,500.00 per student to be trained, Baker fails to tell prospective clients that his software is set to "time out" after one year and the client will have to repurchase a price to re-activate it. Each student that Baker trains must pay to be re-certified each year. We acquired the Baker DVSA and conducted a comprehensive analysis of the system. We determined that the literature describing the system was very misleading.

Just as there were the "imitators" (CCS's Mark II, the Hagoth, LEA's Mark 5 and several others) when the original PSE started to develop the voice stress analysis market, we are seeing a repeat of this today. The National Institute For Truth Verification has simple handedly developed the truth verification market utilizing voice stress analysis over the past sixteen years with a little over 5,000 law enforcement examiners at 1,400 law enforcement and federal agencies throughout the U.S. The CVSA is now also deployed with military/Special Operations and Intelligence Units in Iraq and has a permanent presence at Guantanamo Bay. One of the many reasons for this is the fact that the NITV maintains the highest level of training standards and has developed an unquestioned reputation for integrity.

Before you or your department invests in a truth verification system and the training that is so critical to properly conducting successful exams, it is imperative that you ask the tough questions and scrutinize the system, the company, and the training prior to making the acquisition. For more information on the Computer Voice Stress Analyzer™ or the contact numbers for any VSA on the market today, visit our web site at NITV1.com.